AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A method for the production of plastics containing fillers, comprising the steps of:

    a) mixing a reactive precursor of the filler with a precursor of the plastic to form a mixture;

    b) converting the reactive precursor of the filler in said mixture into the filler; and

    c) polymerizing the precursor of the plastic in said mixture to give the plastic.

2. (Previously Presented) The method as claimed in claim 1, wherein the fillers are selected from inorganic compounds whose particle size is less than 300 nm, with a narrow size distribution.

3. (Previously Presented) The method as claimed in claim 1, wherein the fillers are selected from the group consisting of oxides, sulfides, phosphates, carbonates, and fluorides.

4. (Previously Presented) The method as claimed in claim 1, wherein the polymer precursor is present in the oil phase of a w/o emulsion.

5. (Previously Presented) The method as claimed in claim 4, wherein the reactive precursor of the filler reacts with the, or in the, water present in the emulsion with formation of the filler.

6. (Previously Presented) The method as claimed in claim 1, wherein the polymerization of the polymer precursor is effected as mass polymerization.

7. (Previously Presented) The method as claimed in claim 1, wherein the plastic is selected from the group consisting of transparent plastics.

8. (Previously Presented) The method as claimed in claim 1, which is carried out for the production of transparent moldings.

9. (Previously Presented) The method as claimed in claim 1, which is carried out for the production of transparent coatings on surfaces.

10. (Previously Presented) The method as claimed in claim 3, wherein the fillers are selected from the group consisting of $Mg(OH)_2$, $Mg_6Al_2(OH)_{16}(CO_3)$, SiO_2, TiO_2, ZrO_2, $BaTiO_3$, $PbZrO_3$, $LiNbO_3$, zeolite, MgO, CaO, ZnO, Fe_3O_4, ZnS, CdS, $CaCO_3$, $BaCO_3$, $CaSO_4$, CaF_2 and BaF_2.

11. (Previously Presented) The method as claimed in claim 7, wherein the plastic is selected from the group consisting of transparent plastics based on polyacrylic acids and

salts thereof, polymethacrylic acid and salts thereof, polystyrenes, polyolefins and copolymers of the above.

12. (New) The method as claimed in claim 1, which comprises:

a) forming a microemulsion or miniemulsion from the precursor of the plastic, water and a surfactant;

b) adding the reactive precursor of the filler to the microemulsion or miniemulsion to form the mixture;

c) converting the reactive precursor of the filler in said mixture into the filler; and

d) polymerizing the precursor of the plastic in said mixture to give the plastic.

13. (New) The method as claimed in claim 12, wherein the reactive precursor of the filler is added to the microemulsion or the miniemulsion either (a) mixed with a precursor of the plastic or (b) with a solution of a precursor of the plastic in an organic solvent.